



1980 ANNUAL REPORT

EMPLOYEES' PENSION SYSTEM OF THE

STATE OF MARYLAND

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OFFICE OF RETIREMENT SYSTEM

301 West Preston Street

Baltimore, Maryland 21201

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BOARD OF TRUSTEES
EMPLOYEES' PENSION SYSTEM
OF THE STATE OF MARYLAND

301 W. Preston Street, Baltimore, Maryland 21201

March 1, 1981

The Honorable Harry Hughes
Governor of the State of Maryland
Annapolis, Maryland

Dear Sir:

The Employees' Pension System of the State of Maryland, completed its first year of operation on June 30, 1980. In accordance with provisions of Section 119, Subsection (8) of Article 73B of the Annotated Code of Maryland. The Board has the honor to submit herewith its First Annual Report.

Respectfully submitted,

Board of Trustees of the
Employees' Pension System
of the State of Maryland

CHRIST G. CHRISTIS

Secretary

ACTUARIAL

CERTIFICATION

February 6, 1981

**BUCK
CONSULTANTS**

Board of Trustees
Pension System for Employees of
the State of Maryland
301 West Preston Street
Baltimore, Maryland 21201

Ladies and Gentlemen:

Subsection (7) of Section 119, of the law governing the operation of the Pension System for Employees of the State of Maryland provides that the actuary shall make an annual valuation of the assets and liabilities of the funds of the system. We have the honor to submit herewith the results of the first valuation as of June 30, 1980 made in accordance with this provision of the law.

During the 1979 session of the State Legislature the Pension System for Employees of the State of Maryland was established, effective January 1, 1980, and members of the Employees' Retirement system were permitted to transfer membership to the new Pension System. In addition, the law governing the Pension System requires that all benefits of that system be funded on a full actuarial reserve basis and that the actuarial cost method be the accrued benefit cost method. The liquidation period for the resultant unfunded accrued liability was set at 40 years from June 30, 1980.

Actuarial assumptions were recommended to and adopted by the Employees' Board of Trustees for use under both the Retirement and Pension Systems for valuation purposes on and after June 30, 1980. These assumptions are, in the aggregate, reasonable, and represent our best estimate of anticipated experience under the system.

As stated above, the actuarial cost method utilized is the accrued benefit cost method. This cost method is specifically recognized as an acceptable method by the Employee Retirement Income Security Act of 1974. The current assets applicable to the system were supplied by the Retirement System office. They are valued under the five-year moving average of unit market values method.

In our opinion, the Schedule of Valuation Results appended to this report correctly presents the condition of the Pension System for Employees of the State of Maryland as to those benefits which are funded on an actuarial reserve basis.

The recommended employer normal contribution rates are 4.96 per cent of payroll for municipalities and the State. The recommended State accrued liability contribution rate is 0.20 per cent of payroll. Separate annual

Board of Trustees
February 6, 1981

accrued liability contributions are to be recommended for payment by the municipalities.

The results of the valuation indicate that the recommended rates of employer contribution together with future contributions by members and the assets currently available are adequate to fund the actuarial liabilities on account of all benefits under the system. The liquidation period for the State's unfunded accrued liability is 40 years from June 30, 1980. The municipalities are to fund their accrued liabilities over a 40 year period from June 30, 1980 or over a shorter period if they so elect.

Very truly yours,

GEORGE B. BUCK CONSULTING ACTUARIES, INC.

(Signed) THOMAS J. CAVANAUGH

Thomas J. Cavanaugh, F.S.A.
Consulting Actuary

REPORT OF THE ACTUARY ON THE
FIRST VALUATION OF THE
PENSION SYSTEM FOR EMPLOYEES OF THE STATE OF MARYLAND
AS OF JUNE 30, 1980

SECTION I - SUMMARY OF PRINCIPAL RESULTS

1. As a result of legislative action during 1979, the Pension System for Employees of the State of Maryland was established effective January 1, 1980. Members of the Employees' Retirement System were permitted to voluntarily transfer membership to the Pension System for Employees and a transfer of assets from the Retirement System to the Pension System was made for valuation purposes as of June 30, 1980. The new law requires the use of the accrued benefit cost method with 40 year liquidation of the resultant unfunded accrued liability from June 30, 1980.

2. For convenience of reference, the principal results of the valuation are summarized below.

<u>Valuation Date</u>	:	<u>6/30/80</u>
Number of Active members:	:	
Men	:	11,937
Women	:	<u>16,873</u>
Total	:	28,810
Annual salaries of active members during year:	:	
Men	:	\$ 159,754,297
Women	:	<u>190,419,880</u>
Total	:	\$ 350,174,177
Number of vested deferred cases	:	55
Number of retired members and beneficiaries	:	15
Annual retirement allowances	:	\$ 45,804
Assets for valuation purposes	:	\$ 98,473,384
Normal contribution as per cent of payroll:	:	
State and Municipalities	:	4.96%
Unfunded accrued liability:	:	
State	:	\$ 14,956,880
Municipalities	:	<u>3,632,843</u>
Total	:	\$ 18,589,723
State unfunded accrued liability contribution as per cent of payroll	:	0.20%
Unfunded accrued liability liquidation period (years)	:	40

3. Comments on the valuation results as of June 30, 1980 are given in Section IV and further discussion of the contribution levels is set out in Section V.

4. Schedule B of this report outlines the full set of actuarial assumptions and methods employed. The provisions of the system are summarized in Schedule C.

SECTION II - MEMBERSHIP DATA

1. In order to obtain the aggregate liabilities and assets on account of members of the system as of June 30, 1980, data were needed with respect to each active member and beneficiary of the system and also with respect to terminations during the valuation year. The data with respect to both active and terminated members and beneficiaries were furnished to the actuary by the Retirement System office on a magnetic tape.
2. From the data, tabulations were made showing as of June 30, 1980 the number and salaries of members classified by age and years of service and the number and retirement allowances of beneficiaries on the roll as of June 30, 1980 classified by age or unexpired years of a certain period. These tabulations are presented in Schedule D.
3. With the establishment of the new Pension System for Employees, members of the Employees' Retirement System were permitted to transfer membership to the Pension System on a voluntary basis. The active membership used in this valuation reflects the transfers that actually took place through July 1, 1980. Transfers will continue to be permitted in the future effective July 1 of each year.
4. The following table shows the number of members of the Pension System together with annual salaries as of June 30, 1980.

TABLE I
ACTIVE MEMBERSHIP OF THE
PENSION SYSTEM FOR EMPLOYEES OF
THE STATE OF MARYLAND
AS OF JUNE 30, 1980

GROUP	NUMBER	ANNUAL SALARIES
Men	11,937	\$159,754,297
Women	16,873	190,419,880
Total	28,810	\$350,174,177
Subtotal for State Employees	22,086	\$277,011,336
Subtotal for Employees of Municipalities	6,724	\$ 73,162,841

5. The following table shows the number and annual amount of retirement allowances of beneficiaries on the roll as of June 30, 1980, classified by sex and cause of retirement.

TABLE II

THE NUMBER AND ANNUAL RETIREMENT ALLOWANCES OF BENEFICIARIES
ON THE ROLL AS OF JUNE 30, 1980

GROUP	NUMBER	TOTAL RETIREMENT ALLOWANCES
Service Retirements:		
Men	4	\$ 4,248
Women	4	5,460
Total	8	\$ 9,708
Disability Retirements:		
Men	4	\$ 24,984
Women	3	11,112
Total	7	\$ 36,096
Benefits to Dependents of Deceased Active Members and Beneficiaries:		
Men	-	-
Women	-	-
Total	-	-
Grand Total	15	\$ 45,804

In addition there were 55 deferred retirements included in the valuation.

SECTION III - ASSETS

1. The laws governing the Employees' Retirement System and the Pension System for Employees, as amended through 1979, require a transfer of assets from the Retirement Accumulation Fund of the Retirement System to the Retirement Accumulation Fund of the Pension System. This transfer is to reflect the shift in liabilities from the Retirement System to the Pension System as a result of those who elected to transfer membership to the Pension System. It is recommended that a transfer be made effective June 30, 1980 in the amount of \$97,896,588 at market value.
2. The amount of assets to be taken into account in this and future valuations is a five-year moving average of unit market values based principally on information reported by the Board of Trustees.
3. Under the five-year moving average of unit market values method an artificial unit value is established as a starting point, and based on that value the starting number of units determined. The increase in the number of units is determined by converting the net cash flow, excluding realized gains and losses, into additional units based on the unit value at the beginning of the measurement period. At the end of the measurement period the number of units is divided into the market value of the fund to determine the new unit value. The average unit value over the past five years is multiplied by the number of units available at the valuation date to determine the value of assets at the valuation date.
4. By utilizing the recommended transfer amount of \$97,896,588 and the unit market values in effect for the valuation of the assets of the Employees' Retirement System, assets for valuation purposes were calculated to be equal to \$98,473,384 as of June 30, 1980 based on a five-year moving average of unit market values.

SECTION IV - COMMENTS ON VALUATION

Schedule A of this report contains the results of the valuation which show present assets and liabilities of the system as of June 30, 1980. The following comments on the valuation are pertinent:

The schedule shows that the system has total accrued liabilities of \$117,063,107, of which \$558,056 is for the prospective benefits payable on account of present retired members and beneficiaries, \$442,318 is for the prospective benefits payable on account of members terminated with vested rights and \$116,062,733 is for the prospective benefits payable on account of present active members based on service rendered to the valuation date. Against these liabilities, the system has present assets of \$98,473,384. The difference between the accrued liabilities and the present assets, or \$18,589,723, represents the unfunded accrued liability as of June 30, 1980. Of this total \$14,956,880 is on account of State membership and \$3,632,843 is on account of the membership of the participating Municipalities.

The Employers' contributions to the system are defined by the retirement law to consist of a "normal contribution" which is to cover current liabilities, that is, liabilities accruing on account of service of members during the year following the valuation date, and an "accrued liability contribution" which is to cover liabilities on account of service rendered prior to the valuation date.

The valuation indicates that a normal contribution of \$17,465,381 is required of the State and Municipalities on account of prospective benefits accruing during the year following June 30, 1980 to active

members included in the valuation. Of this total, \$98,754 is to be met by member contributions during the year, and the remainder, or \$17,366,627, is to be met by State and Municipal contributions. This contribution represents 4.96% of the payroll of active State and Municipal members included in the valuation.

In addition, an accrued liability contribution at the rate of 0.20% of payroll is necessary to liquidate the State's unfunded accrued liability of \$14,956,880 over 40 years from June 30, 1980 on a level percent of payroll basis. The accrued liability contribution rate was determined under the assumption that total payroll of the combined active membership of the Retirement and Pension Systems would escalate by 5% per year for the 40 year period. The municipalities are to fund their accrued liabilities over a 40 year period from June 30, 1980 or over a shorter period if they so elect. The accrued liability contributions payable by municipalities are to be certified on the basis of this valuation.

SECTION V - CONTRIBUTIONS PAYABLE UNDER THE PLAN

On the basis of the valuation as of June 30, 1980 a normal contribution rate of 4.96 per cent of payroll for the State and municipalities is being recommended. It is further recommended that the State's accrued liability rate be set at 0.20 per cent of payroll. This rate will be sufficient to fully liquidate the unfunded accrued liability as of June 30, 1980, or \$14,956,880 within 40 years from June 30, 1980.

SECTION VI - EXPERIENCE

The valuation was based on the rates of separation, the mortality tables, interest rate and salary scales adopted by the Board on June 10, 1980. An outline of the actuarial assumptions and methods used is presented in Schedule B.

SECTION VII - ACCOUNTING INFORMATION

1. Opinion No. 8 of the Accounting Principles Board of the American Institute of Certified Public Accountants, as amended by Statement No. 36 of the Financial Accounting Standards Board, requires that certain items of information concerning retirement systems be furnished by the actuary for the State's audited financial statements.
2. Statement No. 35 of the Financial Accounting Standards Board requires that certain items of information be furnished by the actuary for the system's audited financial statements.
3. The information required by the amended Opinion No. 8 and Statement No. 35 includes a comparison of the actuarial present value of accrued (accumulated) benefits with the market value of the assets as of the valuation date. The relevant amounts as of June 30, 1980 are:

	STATE	MUNICIPALITIES	TOTAL
Actuarial present value of accrued benefits:			
Vested benefits			
Participants currently receiving payments	\$ 441,706	\$ 49,528	\$ 491,234
Other participants	42,620,968	10,300,052	52,921,020
	\$43,062,674	\$ 10,349,580	\$53,412,254
Nonvested benefits	4,122,874	1,898,406	6,021,280
Total	\$47,185,548	\$ 12,247,986	\$59,433,534
Assets at market value	-	-	\$ 4,106,551*

*Before asset transfer from the Employees' Retirement System.

The actuarial present value of vested and nonvested accrued benefits is based on an interest rate of 8-1/2%. This rate represents the estimated constant equivalent rate of return for the periods during which payment of these benefits will be deferred based on the interest rates in use as of the valuation date to calculate the Pension Benefit Guaranty Corporation's annuity values for terminating plans.

SCHEDULE A

RESULTS OF THE VALUATION AS OF JUNE 30, 1980

(1)	Accrued Actuarial Liabilities	
	Present value of prospective benefits payable in respect of:	
(a)	Present retired members and beneficiaries	\$ 558,056
(b)	Present terminated members with vested rights	442,318
(c)	Present active members	<u>116,062,733</u>
(d)	Total accrued actuarial liabilities	\$ 117,063,107
(2)	Assets of the System	<u>98,473,384</u>
(3)	Unfunded Accrued Liabilities = (1)(d)-(2)	\$ 18,589,723
(4)	Unfunded Accrued Liabilities of State	\$ 14,956,880
(5)	One year normal contribution for State and municipal active members	\$ 17,465,381
(6)	One year members' contribution	<u>98,754</u>
(7)	One year normal contribution by State and Municipalities = (5) - (6)	\$ 17,366,627
(8)	Total active member payroll	\$ 350,174,177
(9)	State and Municipal normal contribution rate = (7) ÷ (8)	4.96%
(10)	State accrued Liability Rate	0.20%
(11)	State accrued Liability Liquidation Period	40 years

SCHEDULE B

OUTLINE OF ACTUARIAL ASSUMPTIONS AND METHODS

VALUATION INTEREST RATE: 7% per annum, compounded annually.

SEPARATIONS FROM ACTIVE SERVICE: Representative values of the assumed annual rates of withdrawal and vesting, disability, death and early and normal retirement are as follows:

<u>Annual Rates of</u>						
<u>Age</u>	<u>Withdrawal and Vesting</u>	<u>Disability</u>		<u>Death</u>	<u>Retirement</u>	
		<u>Ordinary</u>	<u>Accidental</u>		<u>Early</u>	<u>Normal</u>
25	15.1%	.03%	.01%	.08%		
30	11.2	.04	.01	.10		
35	8.8	.08	.02	.14		
40	7.0	.18	.03	.22	11.3%	
45	5.6	.35	.03	.32	10.3	5.0%
50	5.6	.63	.05	.46	9.9	5.0
55	4.6	1.03	.05	.67	9.6	11.0
60				.96		12.5
65				1.41		22.9
69				1.85		62.9

SALARY INCREASES: Representative value of the assumed annual rates of future salary increases are as follows:

<u>Age</u>	<u>Annual Rates of Salary Increases</u>
25	9.98%
30	8.23
35	7.08
40	7.17
45	7.24
50	5.75
55	6.24
60	5.75
65	6.15
69	5.75

DEATHS AFTER RETIREMENT: According to the 1974 George B. Buck mortality tables. Special tables are used for the period after disability retirement.

VALUATION METHOD: Accrued benefit cost method (with projection). All gains and losses are reflected in the unfunded accrued liability.

ASSET VALUATION METHOD: Five-year moving average of unit market values. Under this method an artificial unit value is established as a starting point, and

based on that value a starting number of units is determined. The increase in the number of units is determined by converting the net cash flow, excluding realized gains and losses, into additional units based on the unit value at the beginning of the measurement period. At the end of the measurement period the number of units is divided into the market value of the fund to determine the new unit value. The average unit value over the past five years is multiplied by the number of units available at the valuation date to determine the value of assets at the valuation date.

SCHEDULE C

SUMMARY OF MAIN SYSTEM PROVISIONS AS INTERPRETED FOR VALUATION PURPOSES

BACKGROUND

The Pension System for Employees of the State of Maryland, which was established on January 1, 1980 under the provisions of Article 73B of the Annotated Code of Maryland, is in its first year of operation. Benefits for membership service under the system are supported mainly by contributions of the State and participating Municipalities.

Membership was compulsory for those regular employees entering State service after December 31, 1979. In addition, members of the Employees' Retirement System of the State of Maryland were permitted to voluntarily transfer membership and service credits from the Retirement System to the Pension System during the period January 1, 1980 through July 1, 1980. Voluntary transfers are further permitted on July 1 of each year.

The following is a brief summary of the benefit and contribution provisions of the Pension System. "Average final compensation" means the average annual compensation received by the member for the three consecutive years of service as an employee during which his earnable compensation was highest. "Social Security integration level" means the average amount of earnings for which Social Security benefits would be provided in any year to a male employee age 65 who had earned the maximum Social Security covered earnings in every year of employment.

BENEFITS

Service Retirement Allowance

Condition for Allowance

Upon the retirement of any member who has attained age 62 and whose age plus service equals 67 or who has rendered 30 years of creditable service, a retirement allowance is payable. Retirement is compulsory at age 70.

Amount of Allowance

The retirement allowance is equal to .8% of the average final compensation of the member not in excess of the Social Security integration level plus 1.5% of the average final compensation in excess of the Social Security integration level multiplied by his years of creditable service.

Early Retirement Allowance

Condition for Allowance

A member who has attained age 55 and rendered 15 years of creditable service may retire and receive an early retirement allowance commencing immediately.

Amount of Allowance

The early retirement allowance is equal to a service retirement allowance based on the member's average final compensation and creditable service at the time of retirement reduced by 1/2 of 1% for each month by which his retirement date precedes the date he will have attained age 62.

Ordinary Disability Retirement Allowance

Condition for Allowance

Upon the application of a member who has become mentally or physically incapacitated for the further performance of duty after 5 or more years of creditable service, or upon the application of the proper official in charge, a disability retirement allowance is payable.

Amount of Allowance

The disability retirement allowance is equal to a service retirement allowance if the member has attained age 62. Otherwise, the disability retirement allowance is calculated in the same manner as a service retirement allowance based on his average final compensation on the date of disability and the creditable service he would have rendered had he continued in service to age 62.

Disability Due to Accident in
the Actual Performance of Duty

Condition for Allowance

Upon the application of a member or of the proper official in charge, a member who has been totally and permanently incapacitated for duty as the result of an accident occurring in the actual performance of duty may be retired on an accidental disability retirement allowance in lieu of an ordinary disability retirement allowance.

Amount of Allowance

The accidental disability retirement allowance is equal to the service retirement allowance if the member has attained age 62; otherwise it consists of the annuity provided by the member's own accumulated contributions and a pension equal to $66\frac{2}{3}\%$ of the member's average final compensation but in no event is the accidental disability retirement allowance to exceed the average final compensation of the member.

Lump Sum Death Benefit

Condition for Benefit

Upon the death of a member in service, a benefit is paid to his estate or to such person as he has nominated unless a benefit is paid to his spouse.

Amount of Benefit

The benefit consists of the return of the member's accumulated contributions and if the member has one or more years of creditable service or if the member dies in the actual performance of duty, an additional lump sum equal to the annual earnable compensation of the member at the time of death.

Death Benefit to Spouse

Upon the death of a member in active service who has attained age 62 or who has attained age 55 and rendered 15 years of creditable service and who has not nominated a beneficiary other than his spouse and who leaves a surviving spouse, said spouse receives a retirement allowance equal to the option 2 allowance that would have been payable had the member retired 30 days prior to death and elected such option where the pension without optional modification in the case of a member who is not eligible for service retirement is calculated on the same basis as though he were eligible for service retirement, except that the spouse may elect to receive in lieu of such allowance the

Return of Contributions

lump sum death benefit including the return of the member's accumulated contributions.

Upon the withdrawal of a member prior to death or retirement, the entire amount of his contributions with interest accumulations is returned to him or to his estate.

Vested Retirement Allowance

Condition for Allowance

Any member whose service is terminated other than by death or retirement after 5 or more years of creditable service may elect to receive a vested retirement allowance in lieu of the return of his accumulated contributions.

Amount of Allowance

The vested retirement allowance is a deferred allowance commencing at age 62, and is equal to the service retirement allowance based on the member's creditable service and average final compensation at the time his service was terminated.

If the member had 15 or more years of creditable service at termination he may elect to have the vested retirement allowance commence at age 55. The allowance so payable will be the actuarial equivalent of the allowance payable at age 62.

Special Privileges Upon Retirement

Members upon retirement may elect to receive the actuarial equivalent of their retirement allowances in any one of the following optional forms:

Option 1 - Reduced payments during life with the provision that in case of death before such payments have equalled the present value of the retirement allowance at the date of retirement, the balance shall be paid to the heirs or assigns.

Option 2 - Reduced payments covering two lives with the provision that at the death of the member the same allowance shall be continued throughout the life of such other person as the member shall have designated at the time of his retirement.

Option 3 - Reduced payments covering two lives with the provision that at the death of the member one-half of his allowance shall be continued throughout the life of

such other person as the member shall have designated at the time of his retirement.

Option 4 - Some other benefit or benefits payable either to the member or to such person or persons as he shall nominate provided such other benefit or benefits, together with the reduced retirement allowance, shall be certified by the actuary to be of equivalent actuarial value to his retirement allowance and be approved by the Board of Trustees.

Post Retirement Adjustments in Allowances

The allowances of retired members are adjusted annually on the basis of the ratio of the Consumer Price Indices from year to year. The maximum annual increase is 3% of the original retirement allowance.

CONTRIBUTIONS

By Members

Each member contributes at a rate of 5% of his earnable compensation in excess of the Social Security taxable wage base each year.

By Employers

The State and participating municipalities make annual contributions based on members' salaries so that when members are ready to retire, reserves will have been accumulated that are adequate to provide the pensions and other benefits payable.

ACCOUNTANTS'

CERTIFICATION



EUGENE J. GERCZAK, CPA
LEGISLATIVE AUDITOR

Division of Audits
State Office Building
Baltimore, Md. 21201
Telephone (301) 383-2512

CHARLES C. PIAZZA, CPA
DEPUTY
ROBERT W. DORSEY, CPA
ANTHONY J. VERDECCHIA, CPA
AUDIT MANAGERS

Board of Trustees
Employees' Pension System
of the State of Maryland

We have examined the balance sheet of the Employees' Pension System of the State of Maryland as of June 30, 1980 and the related statements of revenue and expenses and changes in fund balances for the six months then ended. Our examination was made in accordance with generally accepted auditing standards and, accordingly, included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion, the financial statements referred to above present fairly the financial position of the Employees' Pension System of the State of Maryland at June 30, 1980 and the results of its operations and the changes in its fund balances for the six months then ended, in conformity with generally accepted accounting principles.

Eugene J. Gerczak, CPA
LEGISLATIVE AUDITOR

Robert W. Dorsey, CPA
AUDIT MANAGER

March 3, 1981

EMPLOYEES' PENSION SYSTEM OF THE STATE OF MARYLAND

TRUST FUND
BALANCE SHEET
JUNE 30, 1980

- - ASSETS - -

CASH	\$ 5,203
ACCOUNTS RECEIVABLE:	
State's Contributions - Note 2 b	646,661
Other	240,661
Total accounts receivable	\$ 887,322
INVESTMENTS - Note 2 c:	
Pro rata share of the Combined Fixed Income Fund of the Maryland State Retirement Systems; at amortized cost (market value \$60,804,101 at June 30, 1980)	\$ 73,430,451
Pro rata share of the Combined Equity Fund of the Maryland State Retirement Systems; at amortized cost (market value \$40,462,359 at June 30, 1980)	35,383,222
Other, at cost (approximates market value)	111,891
Total investments	\$ 108,925,564
TOTAL ASSETS	\$ 109,818,089

- - LIABILITIES AND FUND BALANCES - -

LIABILITIES:	
Refunds payable	\$ 97,716
Other	12,968
Total liabilities	\$ 110,684
FUND BALANCES:	
Annuity Savings Fund - Note 2 d	\$ 3,072,100
Retirement Accumulation Fund - Note 2 e	106,635,305
Total fund balances	\$ 109,707,405
TOTAL LIABILITIES AND FUND BALANCES	\$ 109,818,089

The accompanying notes are an integral part of this financial statement.



EMPLOYEES' PENSION SYSTEM OF THE STATE OF MARYLAND

TRUST FUND
STATEMENT OF REVENUE AND EXPENSES BY FUND
FOR THE SIX MONTHS ENDED JUNE 30, 1980

ANNUITY SAVINGS FUND:

Revenue:	
Members' overcontributions - Note 2 d	\$ 707,303
Expenses:	
Refunds - Note 2 d	<u>(726,952)</u>
EXCESS OF EXPENSES OVER REVENUE	<u>\$ (19,649)</u>

RETIREMENT ACCUMULATION FUND:

Revenue:	
Employer's contributions - Note 2 e	\$ 8,563,427
Investment income - Note 2 c	3,091,096
Expenses:	
Benefit payments - Note 2 e	<u>(135,180)</u>
EXCESS OF REVENUE OVER EXPENSES	<u>\$ 11,519,343</u>

The accompanying notes are an integral part of this financial statement.

EMPLOYEES' PENSION SYSTEM OF THE STATE OF MARYLAND

TRUST FUND
STATEMENT OF CHANGES IN FUND BALANCES
FOR THE SIX MONTHS ENDED JUNE 30, 1980

	Annuity Savings Fund (Note 2 d)	Retirement Accumulation Fund (Note 2 e)
Balances, January 1, 1980	-	-
Excess of revenue over expenses (expenses over revenue) - Six months ended June 30, 1980	\$ (19,649)	\$ 11,519,343
Transfers to the Annuity Savings Fund from the Retirement Accumulation Fund for interest credited to members' accounts	127,959	(127,959)
Transfers to the Retirement Accumulation Fund from the Annuity Savings Fund for contributions of retiring members	(10,569)	10,569
Members' contributions transferred from the Em- ployees' Retirement System's Annuity Savings Fund	2,974,359	-
Employers' contributions transferred from the Em- ployees' Retirement System's Retirement Accumu- lation Fund	-	95,233,352
Balances, June 30, 1980	<u>\$ 3,072,100</u>	<u>\$ 106,635,305</u>

The accompanying notes are an integral part of this financial statement.

EMPLOYEES' PENSION SYSTEM OF THE STATE OF MARYLAND

NOTES TO FINANCIAL STATEMENTS

1. ORGANIZATION AND PURPOSE

The Employees' Pension System of the State of Maryland was established on January 1, 1980 and is administered in accordance with Article 73B of the Annotated Code of Maryland. As such, it is managed by the board of trustees for the purpose of providing retirement allowances, death benefits, and disability allowances to State employees and the employees of participating municipal corporations. Enrollment in the Employees' Pension System is optional for all existing employees enrolled in the Employees' Retirement System but is mandatory for State employees hired on or after January 1, 1980. Employees of municipal corporations, hired on or after January 1, 1980, may enroll in the Employees' Pension System upon approval of the legislative body of the municipal corporation.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

a. Method of Reporting

The financial statements of the Employees' Pension System Trust Fund were prepared on the accrual basis of accounting.

b. Contributions Receivable

This receivable represents the contribution due at June 30 from the State, all of which was received in the subsequent fiscal year.

c. Investments

At the close of business on June 30, 1978, the Maryland State Retirement Systems transferred the majority of their investments and the accrued income thereon into combined investment funds, which are structured on a basis similar to that of a mutual fund. In this regard, two commingled funds have been established; the Combined Fixed Income Fund for bonds and other fixed income investments and the Combined Equity Fund consisting principally of common stock. The Employees' Pension System purchased shares of ownership in the combined investment funds during the period January 1, 1980 through June 30, 1980.

Investment income of the combined investment funds is distributed monthly to the systems based on the number of shares owned by each system. The assets of the combined investment funds are carried at cost, or amortized cost when purchase premiums and discounts are involved (see following schedule). Accordingly, the accompanying balance sheet for June 30, 1980 indicates the Employees' Pension System's pro rata share of the assets of the Combined Fixed Income Fund and the Combined Equity Fund. Admission to and withdrawal from each of the combined funds is allowed only on the first business day of each month. The System purchases shares in these funds with receipts collected during the month. However, certain amounts are not invested in the combined funds but are held by the System for the purpose of meeting cash needs for the payment of benefits and refunds. In this regard, the Employees' Pension System utilized temporary idle cash to purchase short term investments (\$111,891 at June 30, 1980).

Net assets of the combined investment funds for all Systems at June 30, 1980, are as follows:

	JUNE 30, 1980			
	Combined Fixed Income Fund		Combined Equity Fund	
	Cost	Market Value	Cost	Market Value
Investments:				
Bonds	\$1,245,960,353	\$1,014,115,992	-	-
Stocks	-	-	\$ 926,963,103	\$1,064,733,900
Commercial paper	101,239,122	101,239,122	53,791,548	53,791,548
Mortgages and ground rents	63,924,918	49,057,740	-	-
Other investments	177,805	177,805	407,383	407,383
Other assets	26,959,383	26,959,383	3,317,114	3,317,114
Total assets	\$1,438,261,581	\$1,191,550,042	\$ 984,479,148	\$1,122,249,945
Less: Accounts Payable - stock purchased ..	-	-	(30,353,911)	(30,353,911)
Net Assets	<u>\$1,438,261,581</u>	<u>\$1,191,550,042</u>	<u>\$ 954,125,237</u>	<u>\$1,091,896,034</u>

At June 30, 1980, accounts payable represents payables to brokers for stocks purchased for which payment has not yet been made.

The allocation of the net assets of the combined investment funds to each System at June 30, 1980, is as follows:

	JUNE 30, 1980			
	Combined Fixed Income Fund		Combined Equity Fund	
	Cost	Market Value	Cost	Market Value
Employees' Retirement System	\$ 440,018,491	\$ 361,434,764	\$ 305,362,500	\$ 349,804,213
Teachers' Retirement System	823,142,151	682,911,694	555,860,995	635,348,598
Employees' Pension System .	73,430,451	60,804,101	35,383,222	40,462,359
Teachers' Pension System ..	55,865,392	46,837,638	27,317,827	31,164,396
State Police Retirement System	45,532,737	39,315,194	30,200,693	35,116,468
State Police Pension Fund .	272,359	246,651	-	-
Total	<u>\$1,438,261,581</u>	<u>\$1,191,550,042</u>	<u>\$ 954,125,237</u>	<u>\$1,091,896,034</u>

Investment income includes interest, dividends and the accumulation of discounts, reduced for amortization of premium and accrued interest paid on securities purchased. Gains and losses due to liquidation are recorded in the fiscal period in which the transaction occurs (completed transaction method).

Net income of the combined investment funds for all Systems for the fiscal year ended June 30, 1980, is as follows:

	JUNE 30, 1980	
	Combined Fixed Income Fund	Combined Equity Fund
Interest:		
Bonds	\$ 88,996,495	\$ 6,040
Commercial paper	23,709,924	7,906,810
Mortgages and ground rents	4,811,753	-
Other	6,598,148	317,014
Dividends	-	33,544,752
Loss on sale of investments	(5,757,768)	(10,804,693)
Total Investment Income	<u>\$118,358,552</u>	<u>\$ 30,969,923</u>

It is the policy of the Systems to actively manage investment portfolios. Although losses are incurred on the sale of investments, the proceeds are reinvested for the purpose of achieving an overall greater return.

The allocation of the combined investment funds' net income to each System for the fiscal year ended June 30, 1980 is as follows:

	JUNE 30, 1980	
	Combined Fixed Income Fund	Combined Equity Fund
Employees' Retirement System	\$ 40,507,350	\$ 9,871,231
Teachers' Retirement System	71,000,362	17,944,426
Employees' Pension System	1,865,688	1,221,129
Teachers' Pension System	1,346,081	876,834
State Police Retirement System	3,617,430	1,056,303
State Police Pension Fund	21,641	-
Total	<u>\$118,358,552</u>	<u>\$ 30,969,923</u>

The following is a detailed analysis of the Employees' Pension System's investment income:

	<u>1980</u>
From Combined Investment Funds (see preceding schedule):	
Pro rata share of the Combined Fixed Income Fund of the Maryland State Retirement Systems net income from investments	\$ 1,865,688
Pro rata share of the Combined Equity Fund of the Maryland State Retirement Systems net income from investments	<u>1,221,129</u>
Total Investment Income From Combined Funds	\$ 3,086,817
Income From Investments Held Exclusively by System:	
Interest on short term investments	<u>4,279</u>
Total Investment Income	<u>\$ 3,091,096</u>

d. Annuity Savings Fund - Members' Contributions

- (1) Members are only required to contribute to the Employees' Pension System 5% of their annual salary that is in excess of the Social Security wage base (wages subject to Social Security tax). Contributions by members together with interest thereon, at 5% per annum, were credited to the Annuity Savings Fund. Upon termination of membership, the member's accumulated contributions are refunded in a lump-sum. Upon retirement, the members' accumulated contributions are transferred from this fund and credited to the Retirement Accumulation Fund.

Members of the Employees' Retirement System who elect to transfer to the Employees' Pension System either are refunded their accumulated contributions and interest thereon; or, at the member's option, the accumulated contributions and interest may be transferred to the member's account in the Annuity Savings Fund of the Employees' Pension System. However, members of the Employees' Retirement System, who earned more than the Social Security wage base during the three fiscal years prior to their transfer to the Employees' Pension System, are required to transfer a portion of their accumulated contributions in the Employees' Retirement System's Annuity Savings Fund to the Employees' Pension System's Annuity Savings Fund. This transfer is based upon the ratio of the average Social Security wage base to the member's average annual salary for the three fiscal years before their transfer. Accordingly, transfers from the Employees' Retirement System's Annuity Savings Fund to the Employee's Pension System's Annuity Savings Fund (\$2,974,359 for fiscal year 1980) consist of both voluntary and required contribution transfers. Upon termination of employment, members can obtain a refund of these funds. However, the member; if vested, may leave his contributions in the System. Upon retirement the member's voluntary contributions, plus interest earned thereon, will be paid to the member as an additional annuity, along with the member's regular pension.

- (2) Retirement contributions continued to be withheld from members' salaries for several weeks subsequent to the date that members transferred from the Employees' Retirement System to the Employees' Pension System. This situation existed because there is a normal time delay of several weeks in processing the transfers. In this regard, during the six months ended June 30, 1980, \$707,303 was withheld from members' salaries and recorded in the Employees' Pension System's Annuity Savings Fund. These amounts were then properly refunded to the members, therefore, the Annuity Savings Fund had no actual revenue for the six months ended June 30, 1980. The additional refunds of \$19,649 (\$726,952 - \$707,303) represent refunds to members who had transferred funds to the Employees' Pension System but terminated employment prior to the end of the fiscal year.

e. Retirement Accumulation Fund - Contributions

Contributions made by employers are credited to the Retirement Accumulation Fund. All lump-sum death and retirement benefits are paid from this fund. The employees' contributions to the Pension System as defined by law, consist of a "normal contribution" to cover current liabilities accruing on account of current service of members, plus an "accrued liability contribution" to

cover credit allowed for service rendered prior to the effective date of employer participation in the System and for subsequent amendments.

During the period January 1, 1980 through June 30, 1980, assets aggregating \$95,233,352, were transferred from the Retirement Accumulation Fund of the Employees' Retirement System to the Retirement Accumulation Fund of the Employees' Pension System. This transfer represented accumulated employer contributions and investment income for those employees who elected to transfer their membership from the Retirement System to the Pension System.

3. ACTUARIAL LIABILITIES

The Retirement Systems have engaged an independent firm of consulting actuaries to prepare annual actuarial valuations and perform various actuarial consulting services for the Retirement Systems of the State of Maryland. In accordance, with the law governing the Pension System, the employers, effective July 1, 1980, shall provide for full funding of benefits of the Employees' Pension System. The accrued benefit cost method is used in determining the employers' normal and accrued liability contribution rates. The liquidation period for the unfunded accrued liability is 40 years from June 30, 1980.

According to the actuarial valuation made by the consulting actuaries, which was based on the accrued benefit cost method, there was an unfunded accrued liability of \$18,589,723 as of June 30, 1980. The amount of the unfunded accrued liability was based on the assumption of full funding for all benefits and on these economic assumptions: interest on investments of 7% compounded annually; annual rates of salary increases from 5.75% to 9.98% based on participants' ages, and a 5% annual cost of living increase.

STATISTICAL

SECTION

THE DISTRIBUTION OF THE NUMBER AND AVERAGE SALARIES
OF ACTIVE MEMBERS BY AGE AS OF JUNE 30, 1980

TABLE I

<u>AGE</u>	<u>MEN</u>		<u>WOMEN</u>	
	<u>NUMBER</u>	<u>AVERAGE SALARY</u>	<u>NUMBER</u>	<u>AVERAGE SALARY</u>
16	-	-	2	\$5,427
17	3	\$4,582	2	\$4,870
18	16	\$6,608	26	\$6,499
19	67	\$7,745	95	\$7,294
20	128	\$7,804	155	\$7,965
21	187	\$8,551	250	\$8,317
22	252	\$8,933	342	\$9,165
23	346	\$9,780	521	\$9,559
24	385	\$10,429	649	\$10,414
25	445	\$11,217	692	\$10,829
26	509	\$11,737	802	\$11,367
27	509	\$12,129	824	\$11,638
28	541	\$12,583	845	\$11,903
29	564	\$13,222	794	\$12,091
30	565	\$13,740	764	\$12,228
31	542	\$14,291	772	\$12,479
32	533	\$14,573	686	\$12,382
33	571	\$15,268	649	\$12,188
34	485	\$15,273	570	\$12,142
35	374	\$15,243	448	\$11,814
36	334	\$15,382	497	\$12,197
37	379	\$15,234	500	\$11,766

THE DISTRIBUTION OF THE NUMBER AND AVERAGE SALARIES
OF ACTIVE MEMBERS BY AGE AS OF JUNE 30, 1980
(CONTINUED)

TABLE I

<u>AGE</u>	<u>MEN</u>		<u>WOMEN</u>	
	<u>NUMBER</u>	<u>AVERAGE SALARY</u>	<u>NUMBER</u>	<u>AVERAGE SALARY</u>
38	340	\$15,266	507	\$11,589
39	284	\$14,838	416	\$11,680
40	243	\$15,313	426	\$11,310
41	204	\$14,910	393	\$11,290
42	236	\$15,018	404	\$11,330
43	214	\$15,353	364	\$11,124
44	188	\$14,341	324	\$10,947
45	214	\$14,864	325	\$11,121
46	183	\$13,952	358	\$10,994
47	192	\$14,659	267	\$10,930
48	177	\$14,059	273	\$11,039
49	185	\$14,143	241	\$10,925
50	160	\$14,227	234	\$10,820
51	179	\$14,363	207	\$10,916
52	168	\$13,073	176	\$10,561
53	125	\$13,313	179	\$10,491
54	118	\$12,557	161	\$10,542
55	126	\$12,766	163	\$10,705
56	144	\$12,909	131	\$10,803
57	93	\$13,883	86	\$10,467
58	87	\$12,489	81	\$10,254
59	78	\$12,265	64	\$10,128
60	67	\$12,431	57	\$ 9,780

THE DISTRIBUTION OF THE NUMBER AND AVERAGE SALARIES

TABLE I

OF ACTIVE MEMBERS BY AGE AS OF JUNE 30, 1980

(CONTINUED)

<u>AGE</u>	<u>MEN</u>		<u>WOMEN</u>	
	<u>NUMBER</u>	<u>AVERAGE SALARY</u>	<u>NUMBER</u>	<u>AVERAGE SALARY</u>
61	58	\$11,514	44	\$9,293
62	48	\$12,307	30	\$10,018
63	36	\$13,270	28	\$8,786
64	23	\$12,008	17	\$10,459
65	15	\$10,813	6	\$9,249
66	10	\$12,188	8	\$7,433
67	11	\$11,381	3	\$5,086
68	9	\$11,442	6	\$5,243
69	6	\$7,519	2	\$10,351
70	4	\$12,420	3	\$8,193
71	3	\$8,176	3	\$2,847
72	2	\$3,742	1	\$4,550
73	1	\$4,451	-	-
79	1	\$47,000	-	-
TOTAL	11,937	\$13,383	16,873	\$11,285

THE DISTRIBUTION OF THE NUMBER AND AVERAGE SALARIES

TABLE II

OF ACTIVE MEMBERS BY YEARS OF SERVICE AS

OF JUNE 30, 1980

<u>YEARS OF SERVICE</u>	<u>MEN</u>		<u>WOMEN</u>	
	<u>NUMBER</u>	<u>AVERAGE SALARY</u>	<u>NUMBER</u>	<u>AVERAGE SALARY</u>
0	1,703	\$10,659	2,214	\$9,172
1	871	\$12,329	1,379	\$10,398
2	1,061	\$12,170	1,479	\$10,493
3	1,103	\$12,426	1,646	\$10,779
4	1,020	\$13,149	1,463	\$11,548
5	1,071	\$13,751	1,719	\$11,810
6	1,035	\$14,137	1,414	\$12,047
7	984	\$14,936	1,431	\$12,024
8	470	\$14,997	714	\$11,938
9	352	\$15,529	478	\$12,323
10	402	\$14,650	613	\$12,295
11	340	\$15,043	520	\$12,559
12	261	\$14,986	396	\$12,425
13	240	\$15,285	388	\$12,455
14	201	\$15,488	273	\$12,611
15	171	\$15,193	196	\$12,584
16	130	\$14,928	162	\$12,445
17	135	\$15,571	126	\$12,927
18	103	\$15,169	55	\$12,269
19	65	\$15,650	56	\$12,507
20	54	\$16,084	37	\$12,609
21	53	\$13,699	29	\$12,386

THE DISTRIBUTION OF THE NUMBER AND AVERAGE SALARIES

TABLE II

OF ACTIVE MEMBERS BY YEARS OF SERVICE AS

OF JUNE 30, 1980

<u>YEARS OF SERVICE</u>	<u>MEN</u>		<u>WOMEN</u>	
	<u>NUMBER</u>	<u>AVERAGE SALARY</u>	<u>NUMBER</u>	<u>AVERAGE SALARY</u>
22	40	\$16,452	27	\$13,104
23	23	\$14,196	22	\$12,931
24	14	\$17,055	16	\$12,995
25	12	\$13,569	5	\$14,150
26	4	\$17,221	4	\$11,914
27	4	\$19,159	3	\$12,697
28	8	\$15,507	2	\$10,121
29	1	\$12,494	-	-
30	1	\$14,889	2	\$11,358
31	1	\$12,559	1	\$9,842
32	2	\$13,919	1	\$9,842
33	2	\$13,380	-	-
35	-	-	1	\$7,112
40	-	-	1	\$11,050
TOTAL	11,937	\$13,383	16,873	\$11,285

THE DISTRIBUTION OF THE NUMBER OF ACTIVE
MEMBERS BY SEX AND ENTRANCE DATE

TABLE III

AS OF JUNE 30, 1981

	<u>MEN</u>	<u>WOMEN</u>
Prior to 1940	-	-
1940-1945	-	1
1946-1950	4	5
1951-1955	18	11
1956-1960	121	111
1961-1965	532	542
1966-1970	1,485	1,994
1971-1975	3,918	5,986
1976-1980	5,859	8,223
TOTAL	11,937	16,873

THE DISTRIBUTION OF THE NUMBER AND AVERAGE SALARIES
OF ACTIVE MEMBERS BY SEX

TABLE IV

<u>FISCAL YEAR</u>	<u>MEN</u>		<u>WOMEN</u>	
	<u>NUMBER</u>	<u>AVERAGE SALARY</u>	<u>NUMBER</u>	<u>AVERAGE SALARY</u>
1980	11,937	\$13,383	16,873	\$11,285

MALE RECIPIENTS OF PENSIONS CLASSIFIED BY AGE

TABLE V

AS OF 6/30/80

TYPE OF PENSIONS

<u>AGE</u>	<u>SERVICE</u>	<u>DISABILITY</u>	<u>BENEFICIARIES</u>	<u>TOTAL</u>
34	-	1	-	1
47	-	1	-	1
59	-	2	-	2
63	1	-	-	1
65	1	-	-	1
67	1	-	-	1
70	1	-	-	1
TOTAL	4	4	-	8
AVERAGE AGE	66.3	49.8	0.0	58.0

FEMALE RECIPIENTS OF PENSIONS CLASSIFIED BY AGE

TABLE VI

AS OF 6/30/80

TYPE OF PENSIONS

<u>AGE</u>	<u>SERVICE</u>	<u>DISABILITY</u>	<u>BENEFICIARIES</u>	<u>TOTAL</u>
46	-	1	-	1
51	-	1	-	1
54	-	1	-	1
55	1	-	-	1
56	1	-	-	1
57	1	-	-	1
68	1	-	-	1
TOTAL	4	3	-	7
AVERAGE AGE	59.0	50.3	0.0	55.3

